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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/695,435	10/28/2003	Gururaj Pangal	112-0123US	4461
29855 7590 12/21/2006 WONG, CABELLO, LUTSCH, RUTHERFORD & BRUCCULERI, L.L.P. 20333 SH 249 SUITE 600 HOUSTON, TX 77070			EXAMINER SUN, SCOTT C	
			ART UNIT 2182	PAPER NUMBER
			MAIL DATE 12/21/2006	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action Before the Filing of an Appeal Brief	Application No. 10/695,435	Applicant(s) PANGAL ET AL.	
	Examiner Scott Sun	Art Unit 2182	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 01 December 2006 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☐ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☐ The period for reply expires _____ months from the mailing date of the final rejection.
 b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
- (a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
 (b) ☐ They raise the issue of new matter (see NOTE below);
 (c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
 (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
 5. ☐ Applicant's reply has overcome the following rejection(s): _____.
 6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
 7. ☐ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
 The status of the claim(s) is (or will be) as follows:
 Claim(s) allowed: _____.
 Claim(s) objected to: _____.
 Claim(s) rejected: _____.
 Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
 9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
 10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:
See attached for examiner's response to applicant's arguments.
 12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). _____
 13. ☐ Other: _____


KIM HUYNH
SUPERVISORY PATENT EXAMINER

12/20/06

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 12/1/2006 have been fully considered but they are not persuasive. Applicant's arguments are summarized as:

- a. Regarding claim 17, the elements cited in prior art of record do not include the function of "operating on" network traffic.
- b. Further regarding claim 17, prior art of record does not teach any of "snapshotting", "journaling" or "migrating" data.
- c. Regarding claim 18, prior art of record does not teach "virtual initiator task" and "virtual target task".
- d. Regarding claims 18 and 19, the rejections are inconsistent regarding the designation of a "virtualization processor".
- e. Further regarding claim 19, the rejection does not provide an element that corresponds to the input/output module.

2. In response to argument 'a', examiner notes that Edsall discloses that "Media Access Control block 304 is provided, which enables frames of various protocols such as Ethernet or fibre channel to be received" and "a virtualization intercept switch 306 determines whether an address specified in an incoming frame pertains to access of a virtual storage location of a virtual storage unit representing one or more physical storage locations on one or more physical storage units of the storage area network" and "the frame may be received from the fabric 320, redirected by 306 to 308" (paragraph 53). Both of these operations are functions in addition to receiving and

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transmitting network traffic, which is performed by the bi-directional connectors 302 and 324. Applicant appears to argue that an operation on the frames must "change substantive portions of the frame". Examiner disagrees, and notes that determining the protocol, performing virtual-physical address mapping, and redirecting the frame to another processor, are all operations on the frame.

3. In response to argument 'b', examiner notes that applicant provided definitions of "storage snapshot" and "journaling file system" as evidence that prior art does not teach these functions. However, these evidences are defective for at least three reasons. First, there is no date associated with the definitions, and therefore the definitions are not necessarily the definitions known to one of ordinary skill in the art at the time of invention. Second, the definitions are for "storage snapshot" and "journaling file system", and are not necessarily equivalent to the "snapshotting of data on a storage unit" and "journaling of data being written to a storage unit" stated in the claims. Lastly, even assuming the definitions are known at the time of invention and claim limitations are equivalent to the terms being defined, the definitions provided are merely one or many possible definitions known to one of ordinary skill in the art. For example, The IEEE dictionary (*The Authoritative Dictionary of IEEE standards terms, 7th edition*) defines "snapshot" as "a copy of all or portions of the data contained in storage or in a database at a particular point in time", which is exactly what Edsall teaches - "point in time copying" (paragraph 43).

4. In response to argument 'c', examiner notes that applicant argues that the commands are not "tasks" based on the description of a "task" given by the applicant.

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However, none of such description of a task is in the claims, and therefore reminds applicant that although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). As explained by Edsall (paragraph 45-47), the switch connects hosts, known as initiators, with memory devices known as targets. The initiators communicate with the physical targets through virtual target addresses, which the switch converts to actual or physical addresses and then forwards to the actual targets. Therefore, to the target, the switch functions as an initiator; and likewise to the initiator, the switch functions as a target. These functions of communicating with the initiator and targets can be viewed as virtual initiator tasks and virtual target tasks as the switch is neither really an initiator nor a target.

5. In response to argument 'd', examiner notes that claim 18 does not include any element that is a virtualization processor, but merely that one of the processors in the input/output module include three additional elements. Claim 19, while requiring a virtualization processor, merely states that "said input/output module and said control module support a virtualization processor". This limitation suggests nothing about the location of the virtualization processor. Therefore, the virtualization processor can be located anywhere in the system, such as within the control module as the logic that performs address mapping.

6. In response to argument 'e', examiner notes that the rejection of claim 17 cites various elements as collectively being the input/output module. Because claim 19 depends on claim 17, and does not recite a new input/output module, it is assumed the

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same elements are designated as the input/output module. Furthermore, contrary to applicant's remarks, the network switch has an address in order to communicate with other devices. The switch is seen by the targets as an initiator, and therefore its address would represent a virtual initiator.

7. Having responded to each of applicant's arguments, examiner notes that prior art of record still provide a valid ground of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Sun whose telephone number is (571) 272-2675. The examiner can normally be reached on M-F, 10:30am-7pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim N. Huynh can be reached on (571) 272-4147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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